

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-13. (Cancelled)

14. (New) A process for the extraction of aromatic material from lube oil distillate, the process comprising:

contacting the lube oil distillate with a solvent and producing an extract phase and a raffinate product phase; and

separating the extract phase from the raffinate product phase;

in which:

the lube oil distillate comprises 25 to 80% of the aromatic material;

the solvent comprises furfural and a co-solvent capable of facilitating phase separation;

the co-solvent is selected from the group consisting of aliphatic amides having fewer than five carbon atoms; and

the ratio of furfural to the co-solvent is in the range of 70:30 to 95:5.

15. (New) The process of claim 14 in which the aliphatic amide comprises a carbon chain of three or fewer carbon atoms.

16. (New) The process of claim 15 in which the co-solvent is N,N-dimethyl formamide.

17. (New) The process of claim 14 additionally comprising the step of removing solvent from the raffinate product phase and forming a raffinate,

in which the yield of the raffinate increases more than 3 vol% with the addition of the co-solvent compared to a furfural extraction process without the addition of the co-solvent.

18. (New) The process of claim 17 in which the yield of the raffinate increases more than 5 vol%.

19. (New) The process of claim 17 in which the product quality of the raffinate is maintained, as measured by raffinate refractive index.

20. (New) The process of claim 19 in which the co-solvent is N,N-dimethyl formamide.

21. (New) The process of claim 14 in which the lube oil distillate has a boiling point in the range of 300°C to 600°C.

22. (New) The process of claim 14 in which the lube oil distillate has a boiling point in the range of 370°C to 565°C.

23. (New) The process of claim 14 in which the solvent dosage is less than 250 vol%.

24. (New) The process of claim 14 in which the solvent dosage is less than 180 vol%.

25. (New) The process of claim 14 in which the solvent dosage is less than 150 vol%.

26. (New) The process of claim 14 in which the process is a continuous countercurrent extraction process.

27. (New) A process for the extraction of aromatic material from lube oil distillate, the process comprising:

contacting the lube oil distillate with a solvent and producing an extract phase and a raffinate product phase; and

separating the extract phase from the raffinate product phase;

in which:

the lube oil distillate comprises 25 to 80% of the aromatic material;

the solvent comprises furfural and a co-solvent capable of facilitating phase separation;

the co-solvent is selected from the group consisting of formamide, N-methyl formamide, N,N-dimethyl formamide, acetamide, N-methyl acetamide, N,N-dimethyl acetamide, propionamide, N-methyl propionamide, N,N-dimethyl propionamide, and mixtures thereof; and

the ratio of furfural to the co-solvent is in the range of 70:30 to 95:5.

28. (New) The process of claim 27 additionally comprising the step of removing solvent from the raffinate product phase and forming a raffinate,

in which the yield of the raffinate increases more than 3 vol% with the addition of the co-solvent compared to a furfural extraction process without the addition of the co-solvent.

29. (New) The process of claim 28 in which the yield of the raffinate increases more than 5 vol%.

30. (New) The process of claim 28 in which the product quality of the raffinate is maintained, as measured by raffinate refractive index.

31. (New) The process of claim 27 in which the lube oil distillate has a boiling point in the range of 300°C to 600°C.

32. (New) The process of claim 27 in which the solvent dosage is less than 250 vol%.

33. (New) The process of claim 27 in which the process is a continuous countercurrent extraction process.

1
B
cont